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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/973,017	03/25/98	LEIJON	M 70557-2/8239

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EXAMINER

ENAD,E

ART UNIT

PAPER NUMBER

2834

11

DATE MAILED: 11/08/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/973,017

Applicant(s)

Leijon et al.

Examiner

Enad, Elvin

Group Art Unit

2834



☒ Responsive to communication(s) filed on Sep 27, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-4, 6-35, 37, and 39-50 is/are pending in the application.

Of the above, claim(s) 22-29 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 6-21, 30-35, 37, and 39-50 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 9

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Objections

1. Claims 22-29 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations set forth in the claims do not further limit the rotating electrical machine but instead define a structure outside the electrical machine.

Claim Rejections - 35 USC § 112

2. Claims 10,13,20,21 and 43 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, reference to “the conductive core” is lacking proper antecedent basis.

In claim 13, reference to “the magnetic circuit” is lacking proper antecedent basis.

In regard to claim 20, reference to the “generator” is lacking proper antecedent basis.

Also, in claim 21, “the electrical generator” is lacking proper antecedent basis.

In regard to claim 43, the limitation pertaining to the layers being “substantially void free” is vague and indefinite.

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Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3,10,12,21,31,32,34,35 and 37 are rejected under 35 U.S.C. § 102(b) as being fully anticipated by Elton et al. (USP 5,036,165).

Elton et al. disclose an electrical cable provided with an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with a cable conductor. In an alternate embodiment, Elton et al. disclose an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator having a predetermined reference potential.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 4,6-9,13-20,30,33 and 39-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) in view of Takaoka et al. (USP 5,094,703) and further in view of German Patent Specification No. 468,827.

Elton et al. disclose the claimed invention except for having cable windings which consists of a plurality of strands having electrical conductors which are insulated and uninsulated. In addition, Elton et al. do not disclose having a stator comprising slot(s) consisting of a number of cylindrical openings separated by narrow waist parts.

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

German Patent Specification No. 468,827 teaches that it is known to have a stator having cylindrical opening winding slots with decreasing radius in order to accommodate the winding conductors having varying diameters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the teaching of Takaoka et al. having insulated and uninsulated electrical conductor strands and to have modified the device of Elton et al. since such a modification according to Takaoka et al. would reduce the amount of insulation needed and the number of electrical connections required in the end windings. Moreover, it would have been obvious to have used the stator slot arrangement as taught by German Patent Specification No. 468,827

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since such an arrangement according to column 1, lines 25-29 would accommodate the conductors having varying diameters.

7. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

8. Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Elton et al. (USP 5,036,165) in view of Takaoka (USP 5,094,703) and further in view of Olsson et al. (USP 4,109,098)

Elton et al. and Takaoka et al. disclose the claimed invention except for the cable having a metal screen and a sheath.

Olsson et al. teach that it is known to utilize a cable having metallic shield or screen 6 jacketed by a mantle 7, see figure 2.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided used the teaching of having a metallic screen on the cable as taught by Olsson et al. and to have modified the device of Elton et al. or Takaoka et al. since such a

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modification according to column 3, lines 53-60 of Olsson et al. would provide a ground having means to discharge the field currents.

Response to Arguments

9. Applicant's arguments filed on September 27, 1999, have been fully considered but they are not persuasive. In response to applicant's arguments that Elton fails to suggest or teach the use of his cable in a dynamo-electric machine, applicant's attention is directed to the abstract whereby Elton suggests that his insulated conductor may be used in windings of dynamoelectric machine.

In response to applicant's arguments that Elton does not provide a solid insulating system, note that element **106** in figure 1 is an insulation. Moreover, this arrangement is also known and taught by Breitenbach et al. (USP 4,785,138).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:00PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for this Tech Center is (703) 305-3431(32).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Elvin Enad
Primary Examiner
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11.02.99